The Creation of Universe in the Light of Qur'an

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Abstract:

The Quran describes itself as a book of guidance. Sura l-Baqarah, verse (67) states: قَالَ أعُوْذُ بِاللهِ انْ أَكُوْنَ مِنَ الْجٰهِلِيْنَ۔ *He said, "I seek refuge in Allah from being among the ignorant. "The Qur'an does not render a coordinated description of the universe Creation and how it will end. In lieu of a continuous story of creation and cease, there are verses dispersed all over the Quran which deal with certain aspects of the universe's Creation and end. These scattered verses provide information on the sequential events marking its development with varying degrees of detail. The primary objective of this paper is to analyze the Quranic Concept of Universe. The idea of steady state by Hermann Bondi, Thomas Gold, and Fred Hoyle (1948) suggests that this universe is created with big bang, it is expanding and it would be the same, always static, always contracting or always expanding with no end. This is in contrast with the pulsating theory of the accelerating expansion will result in weak gravity which will cause the universe to contract. When this contraction will condense everything back into one single point, this rapid compression will lead to another explosion (often referred to as mini big bang). As a result of which the universe will start expanding again. Hence it results in a pulsating universe in which there is alternate expansion and contraction of universe.*

The Quranic concept of universe creation is perfectly in line with these theories, Quran state that "We have created the heavens and the earth and all that is between them, ONLY for a genuine purpose and an appointed time (*Chapter (46) sūrat l-aḥqāf (The Curved Sand-hills) Verse 3)*. At another occasion Quran states "Travel through the land and see how He has begun the creation and how He will invent the next life. God has power over all things.*Chapter (29) sūrat l-ʿankabūt (The Spider) Verse 19-20).*After a definite time universe will collapse followed by an eternal creation.

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Introduction

One of the most fascinating thing about the universe is how little we really know about our universe and just how many theories the scientific community has produced—and how different some of them are. Cosmologists tried to explain the evolution of universe and have a great deal of ideas about the origin of universe. The most striking theory about how the universe commenced is the Big Bang[1],[2]. According to this theory, the universe originated in an enormous explosion or Big Bang. Before the Big Bang, all of the matter and energy now in the universe was contained in singularity. A singularity is a point with an extremely high temperature and infinite density. This singularity exploded, tossing away gas and energy in all directions, at tremendous speeds. This spinning cloud of dust was referred to as solar nebula or molecular clouds[3]. This molecular cloud eventually formed the universe we see today. The Big Bang theory is currently well established based on the following three observational facts: the abundance of the lightest elements in space, the expansion of universe (red shifting of signals), and the existence of cosmic background radiation (CBR)[4]. As for as the end of the universe is concerned two most important ideas: are steady state and pulsating universe theory.

Steady State model of Universe:

An alternative theory to the Big Bang was proposed by Jeans in the 1920s, he was the first to hypothesize a steady state cosmology based on a supposed continuous creation of matter in the Universe[5]. This theory was favored by Hermann Bondi, Thomas Gold, and Fred Hoyle in 1948 and was called the steady-state theory[6]. They discovered that the idea of a sudden beginning of the universe is philosophically unsatisfactory. Bondi and Gold suggested that in order to understand the universe we need to make observations from the past. In order to explicate those observations we must use the laws of physics, and those have been formulated recently. If the state of the universe was different in the past how could we be sure that the laws of physics were not different in the past as well? If they were different no valid conclusions could be drawn. For Bondi and Gold not only would the laws of physics have to be the same in all parts of the universe but at all times as well. The universe would also be the same, always static, always contracting or always expanding. This theory is referred to as Steady State theory.

Steady state approaches the problem mathematically and tries to solve the problem of creation of matter which is produced in the beginning. They suggested that the decrease in the density of the universe caused by its expansion is exactly balanced by the continuous creation of matter condensing into galaxies thereby maintaining eternally, the present appearance of the universe. The expansion and creation now work against each other and a steady state of energy is maintained.

Steady state is not without problems, there are several areas which are unexplained. The steady-state theory is now no longer accepted by most cosmologists, particularly after the discovery of microwave background

radiation in 1965, and quasars in 1966[7] contradicting the steady-state theory for which steady state has no explanation. While the steady state model enjoyed some popularity in the mid-20th century, it is now rejected by the vast majority of cosmologists, astrophysicists and astronomers, as the observational evidence points to a Big Bang-type cosmology with a finite age of the universe, which the Steady State theory does not predict[8].

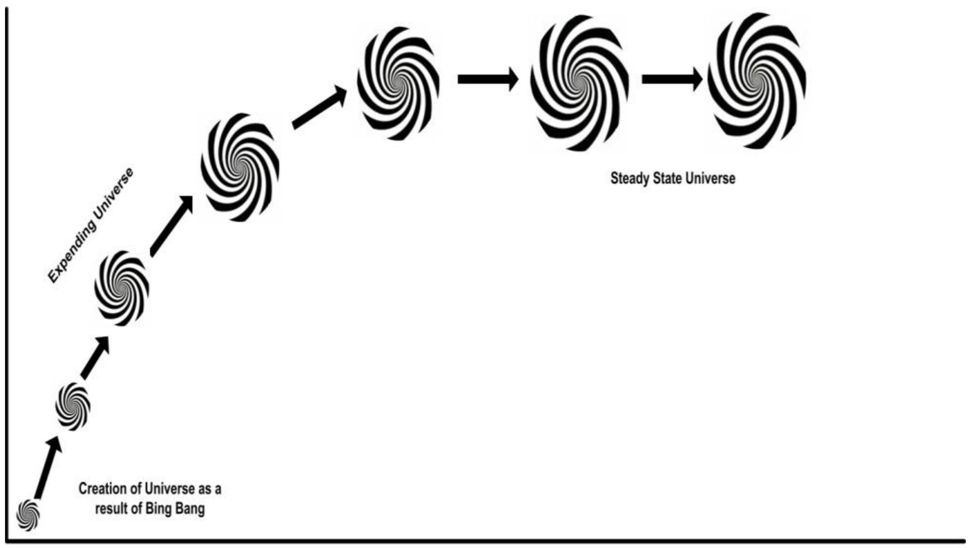


Figure 1: Steady State model of the Universe

Pulsating model of Universe:

The general concept of a pulsating, cyclic or oscillating universe is a very old, but it was formally formulated in a mathematically precise way after the advancment of theory of the relativity. Ever since Alexander Friedmann introduced the possibility of a closed cyclic universe in 1922[9]. The Pulsating Universe theory presumed that there is continuous expansion and contraction in universe. As for as the origion and expansion of universe is concerned. Both the theories have same stance. The only difference is how the universe will collepsed and whether or not the universe will have rebirth or not . Pulsating theory states that it is the possibility that after some time the expansion in the universe may stop followed by the possibility of contraction. When this contraction will approach to a particular size. Again the explosion will take place. As a result of this explosion the expansion of universe will start again. Hence it results in a pulsating universe in which there is alternate expansion and contraction of universe[10].

The pulsating universe though controversial has attracted interest among a minority of astronomers and physicists. At the same time it has been widely seen as inquisitive[11]. The concept of Pulsating Universe is illustrated in figure 2.

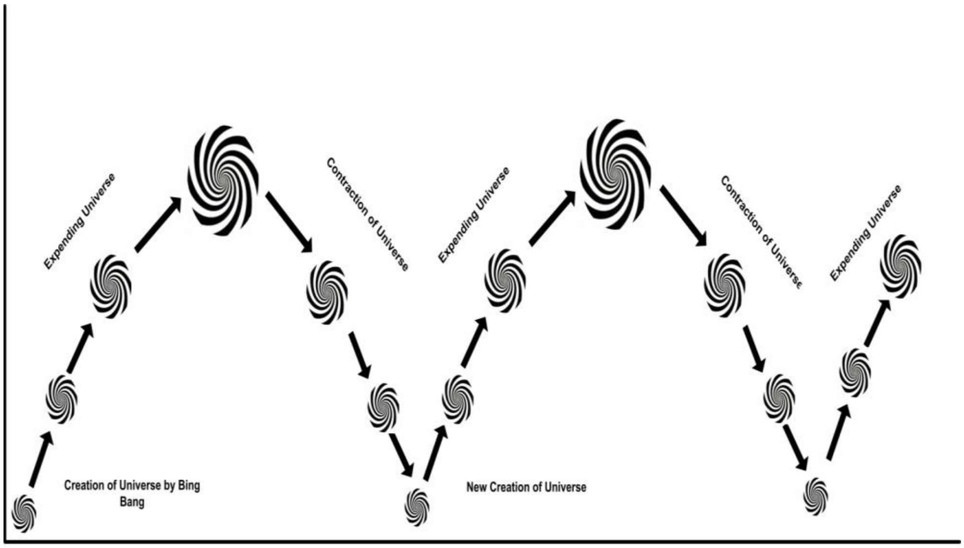


Figure 2: Pulsating, Oscillating or cyclic models of the universe

Quranic model of Universe:

At the time when the Quran was revealed (7th century), it was widely believed that all the celestial bodies, including our sun were eternal with no chance of fading or decay. According to the Quran this universe—Earth and Heavens— has definite life period and has some definite objectives like other creations

اللّهُ الَّذِي رَفَعَ السَّمَاوَاتِ بِغَيْرِ عَمَدٍ تَرَوْنَهَا ثُمَّ اسْتَوَى عَلَى الْعَرْشِ وَسَخَّرَ الشَّمْسَ وَالْقَمَرَ كُلٌّ يَجْرِي لأَجَلٍ مُّسَمًّى يُدَبِّرُ الأَمْرَ يُفَصِّلُ الآيَاتِ لَعَلَّكُم بِلِقَاء رَبِّكُمْ تُوقِنُونَ

Muhammad Sarwar translates it thus: God is the One Who raised the heavens without a pillar as you can see. Then He established his control over the realm and made the sun and moon subservient to Him. Each of them will remain in motion for an appointed time. He regulates all affairs and explains the evidence (of His existence) so that perhaps you will be certain of

your meeting with your Lord. *Chapter (13) sūrat l-raʿd (The Thunder) Verse: 2*[12].

Similarly on another occasion Quran states:

مَا خَلَقْنَا السَّمَاوَاتِ وَالْأَرْضَ وَمَا بَيْنَهُمَا إِلَّا بِالْحَقِّ وَأَجَلٍ مُّسَمًّى وَالَّذِينَ كَفَرُوا عَمَّا أُنذِرُوا مُعْرِضُونَ.

We have created the heavens and the earth and all that is between them ONLY for a genuine purpose and an appointed time. The unbelievers ignore that of which they have been warned. *Chapter (46) sūrat l-aḥqāf (The Curved Sand-hills) Verse: 3*[13].

أَوَلَمْ يَرَوْا كَيْفَ يُبْدِئُ اللَّهُ الْخَلْقَ ثُمَّ يُعِيدُهُ إِنَّ ذَلِكَ عَلَى اللَّهِ يَسِيرٌ

Have they not seen how God begins the creation and then turns it back? This is not difficult at all for God. *Chapter (29) sūrat l-ʿankabūt*

قُلْ سِيرُوا فِي الْأَرْضِ فَانظُرُوا كَيْفَ بَدَأَ الْخَلْقَ ثُمَّ اللَّهُ يُنشِئُ النَّشْأَةَ الْآخِرَةَ إِنَّ اللَّهَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ

(The Spider) Verse: 19[14].

(Muhammad), say to them, "Travel through the land and see how He has begun the creation and how He will invent the next life. God has power over all things. *Chapter (29) sūrat l-ʿankabūt (The Spider) Verse: 20*[15].

قُلْ هَلْ مِن شُرَكَآئِكُم مَّن يَبْدَأُ الْخَلْقَ ثُمَّ يُعِيدُهُ قُلِ اللّهُ يَبْدَأُ الْخَلْقَ ثُمَّ يُعِيدُهُ فَأَنَّى تُؤْفَكُونَ

(Muhammad), ask them,"Can any of your idols create something (cause it to die), and then bring it back to life again?" Say, "Only God can originate the creation and bring it to life again. Where have you strayed?" *Chapter (10) sūrat yūnus (Jonah) Verse: 34*[16].

قُلْ هَلْ مِن شُرَكَآئِكُم مَّن يَبْدَأُ الْخَلْقَ ثُمَّ يُعِيدُهُ قُلِ اللّهُ يَبْدَأُ الْخَلْقَ ثُمَّ يُعِيدُهُ فَأَنَّى تُؤْفَكُونَ

"(Are the idols worthier or) the One who began the creation and who will turn it back, who gives you sustenance from the heavens and the earth? Is there any lord besides God? Say,

"Bring your proof if what you say is true." *Chapter (27) sūrat l-naml (The Ants) Verse: 34*[17].

يَوْمَ نَطْوِي السَّمَاء كَطَيِّ السِّجِلِّ لِلْكُتُبِ كَمَا بَدَأْنَا أَوَّلَ خَلْقٍ نُّعِيدُهُ وَعْدًا عَلَيْنَا إِنَّا كُنَّا فَاعِلِينَ

(This will happen) on the day when We roll up the heavens as if it were a written scroll and bring it back into existence just as though We had created it for the first time. This is what We have promised and We have always been true to Our promise. *Chapter (21) sūrat l-anbiyāa (The Prophets) Verse: 104*[18].

أَلَمْ تَرَ أَنَّ اللّهَ خَلَقَ السَّمَاوَاتِ وَالأَرْضَ بِالْحَقِّ إِن يَشَأْ يُذْهِبْكُمْ وَيَأْتِ بِخَلْقٍ جَدِيدٍ

Have you not seen that Allah created the heavens and the earth in truth? If He wills, He can do away with you and produce a new creation. *Chapter (14) sūrat Ib'rāhīm (Abraham)Verse: 19*[19]**.**

In conclusion the Quran has a definite theory about the creation and life span of universe. which is quite different from the concept of Steady State and Pulsating theory. According to Quran This universe is created from smoke (Dukhan) (***Then He directed Himself to the heaven while it was smoke and said to it and to the earth, "Come [into being], willingly or by compulsion (Surat fuṣṣilat, Verse (11),*** for a definite time and objectives ***(We have created the heavens and the earth and all that is between them ONLY for a genuine purpose and an appointed time. Chapter (46) sūrat l-aḥqāf (The Curved Sand-hills) Verse: 3)***, It is expending for a definite time **(*And the heaven We constructed with powe,r and indeed, We are [its]* expanding it. *Chapter (51) Surat l-Dhariyat (The Wind that Scatter): verse 47),*** and then it will collapse followed by the creation of another eternal universe ***(This will happen) on the day when We roll up the heavens as if it were a written scroll and bring it back into existence just as though We had created it for the first time. This is what We have promised and We have always been true to Our promise. Chapter (21) sūrat l-Anbiyāa (The Prophets) Verse: 104***.

This Quranic model is illustrated graphically is figure 3.

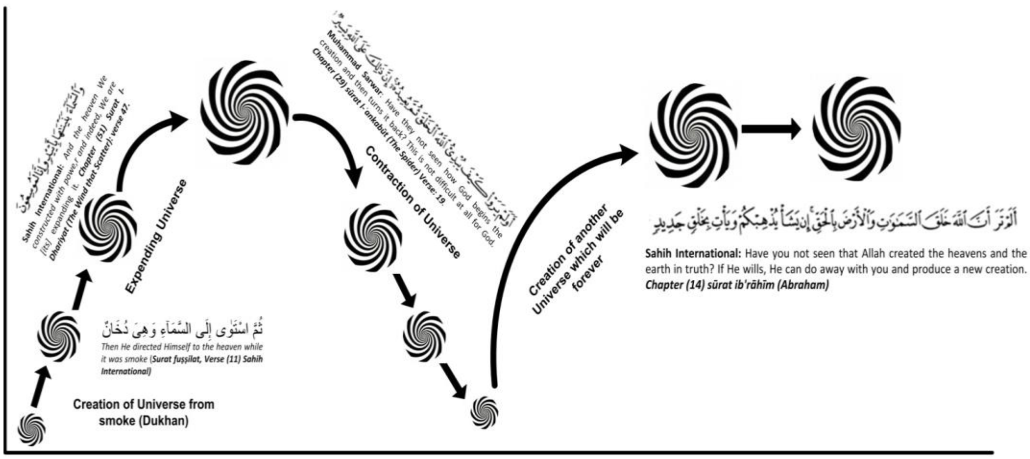


Figure 3. Quranic / Islamic model of the Universe

An important question is how the universe will encounter its fate. Various verses point towards this fact for example verse 51-47 point towards the expansion of the universe, Similarly verse 77-8, 81-2 indicate that the stars will fade way, verse 81-3, 77-10, 101-5 state that mountains will be blown away as carded wool. All this point towards the possibility of newly presented scientific idea i.e. Big Rip, which will be the result of accelerated expansion.

Conclusion:

From the above analysis it is evident that the Islamic concept of creation of universe is in line with the modern scientific theories. These theories not only increase our understanding of the universe but also helpful in the understanding of the Quran and Hadith. The modern scientific concepts were clearly envisioned in the Qur'an date back to 7th century when observational facilities were not available, mathematical principles were not discovered, primary principles (quarks), quasars, fundamental forces i.e. gravitational, electromagnetic and microwave background radiation were not discovered. The Qur'an does not provide an interconnected description of the Creation nor its end. Instead of a continuous story of creation, there are verses dispersed all over the Quran which deal with certain aspects of the creation and apocalypse.

According to Dr. Mehdi Golshani (1998)[20] there are lots of disarray and misconception among modern cosmologists regarding the problem of creation. This is the result of their lack of philosophical understanding. The problem of creation is not a matter of science alone. It needs theological and philosophical manifestation as well. One should explore the universe, by science, but avoid making claims about the absolute origination of the universe on physical grounds. Philosophy and theology can save us from making fallacious

exaggerated scientific claims and can give us a proper metaphysical framework for our science and a ground for our being. In this framework, the description of the physical aspects of the universe is left for scientific investigation but the ultimate truth of the universe is provided by God Almighty.

References:

1 Gamow, George (1951). "The origin and evolution of the universe." American Scientist 39: 393-407.

2 Gamow, George (1952). The Creation of the Universe. New York: Viking Press

3 Williams, J. P.; Blitz, L.; McKee, C. F. (2000). "The Structure and Evolution of Molecular Clouds: from Clumps to Cores to the IMF". Protostars and Planets IV. Tucson: University of Arizona Press. p. 97.

4 Filippenko A V (1998) The Birth and Life of the Universe, Part V. The Teaching Co. Springfield, VA

5 Narlikar, J.V.. Vishwakarma R.G, G. Burbidge (2002) Interpretations of the Accelerating Universe. Publ. Astron. Soc. Pac. 114, 1092-1096

6 Bondi, H. and Gold, T. (1948) Monthly Notices of the Royal Astronomical Society (M.N.R.A.S.), 108, 252

7 Penzias, A.A.; Wilson, R.W. (1965). "A Measurement of Excess Antenna Temperature at 4080 Mc/s". Astrophysical Journal 142: 419–421. Bibcode:1965ApJ...142..419P. doi:10.1086/148307.

8 Helge Kragh (1999) Cosmology and Controversy: The Historical Development of Two Theories of the Universe - Princeton University Press.

9 Friedmann, Alexander (1922). "Über die Krümmung des Raumes." Zeitschrift für Physik 10: 377-386.

10 Steinhardt, P.J. and Turok, N. (2001) A Cyclic Model of the Universe. Science 296, 1436– 1439.

11 Frampton P.H. (2006). "On Cyclic Universes". arXiv:astro-ph/0612243 [astro-ph].

12 Chapter (13) sūrat l-raʿd (The Thunder) Verse: 2

13 Chapter (46) sūrat l-aḥqāf (The Curved Sand-hills) Verse: 3.

14 Chapter (29) sūrat l-ʿankabūt (The Spider) Verse: 19.

15 Chapter (29) sūrat l-ʿankabūt (The Spider) Verse: 20.

16 Chapter (10) sūrat yūnus (Jonah) Verse: 34.

17 Chapter (27) sūrat l-naml (The Ants) Verse: 34.

18 Chapter (21) sūrat l-anbiyāa (The Prophets) Verse: 104.

19 Chapter (14) sūrat ib'rāhīm (Abraham) Verse: 19

20 Golshani, Mehdi (1998) Ways of Understanding Nature in the Qur'anic Worldviews (SSTh 6/1998), ed. by N. H. Gregersen et al. (Geneva: yuLabor et Fides, 1999), p. 183.